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EXAMINER

CHAKOUR, ISSAM

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2617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/562,587

Applicant(s)

PITKAMAKI ET AL.

Examiner

ISSAM CHAKOUR

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to the amendments and arguments filed on 08/15/2008.

The applicant amended the abstract of the disclosure to conform to specification requirements in accordance with MPEP § 608.01(b).

The applicant also amended claim 3 to overcome objection based on insufficient antecedent basis. The claim is in proper format, the examiner withdraws claim 3 objection.

The applicant amended claims 1, 3, 8-13, and 16 and a new claim 17 is introduced with "means-plus-function" terminology.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4, 5, 8, 10, 12, 13, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Ko et al (US 2003/0100299).
3. As to claim 1, Ko teaches a method for transmitting trace data to a network tester (See claim 1) comprising:
tracing the data transmission between a mobile terminal and a network (See [0017], lines 1-5 and [0018], lines 1-2),

transmitting the trace data (e.g. test traffic data, [0055] lines 3-4) by using a standardized interface specification ([0064], lines 4-8), and controlling, via specific AT commands designed for tracing and supplementing an AT command set known as such (e.g. using a set of AT commands to retrieve trace data or test traffic data from the network, see [0033] line 5 and [0116] line 4-8) the setting of the trace parameters and the communicating of the trace data (e.g. inserting or configuring test traffic data, see [0059], lines 1-3 and claims 1, 19, 32 and 33).

4. Regarding claim 4, Ko discloses the method in accordance with claim 1, he further teaches the method comprising using, in addition to the specific AT command set, a normal AT command set known as such in controlling the operation of the mobile terminal, but allowing the use of only one command set at a time in controlling the mobile terminal (See [0016], Note that the communication via DTE/DCE using AT commands is serial, and allow one command transmitted at a time).

5. Regarding claim 5, Ko further teaches the method in accordance to claim 1, Ko further teaches modifying the trace data to be sent to the network tester into a format wherein the trace data comprises only the data substantial from the point of view of tracing (See [0068], lines 1-9).

6. With respect to claims 8,10, and 17, Ko teaches a trace system and terminal (See figure 5), comprising:

a network tester and a mobile terminal configured for collecting trace data and communicating the trace data to the network tester (see [0019] and claim 1) wherein the trace data applies only to the data transmission between the mobile terminal and a network (See [0068], lines 1-9)., and a standardized interface (e.g. serial port, see [0064], line 6-7) configured to communicate the trace data, and a control configured (See [0063] lines 5-10) for setting the parameters of tracing and for communicating the trace data (e.g. inserting or configuring test traffic data, see [0059], lines 1-3 and claims 1, 19, 32 and 33). Ko further teaches that the communication between the mobile terminal or station and the network tester or a computer is done and controlled via AT commands designed for tracing and supplementing an AT command set known as such.(e.g. using a set of AT commands to retrieve trace data or test traffic data from the network, see [0033] line 5 and [0116] line 4-8)

7. With respect to claim 12, Ko teaches the terminal according to claim 10 for transmitting traffic data to a network tester wherein the terminal further comprises: A module for connecting an external network tester to the terminal, in which the external network tester is intended for receiving the trace data (See [0099]), for providing said specific AT commands .(e.g. using a set of AT commands to retrieve trace data or test traffic data from the network, see [0033] line 5 and [0116] line 4-8)

8. Regarding Claim 13, Ko discloses a network tester configured for data transmission between a mobile terminal and a network (see claim 16), the network

tester being further configured to collect trace data (see [0019] and claim 1), which applies to said data transmission (See claim 1), wherein the network tester comprises: a standardized interface (e.g. serial port, see [0064], line 6-7) configured for setting the trace parameters and for communicating the trace data (e.g. inserting or configuring test traffic data, see [0059], lines 1-3 and claims 1, 19, 32 and 33), controlled with specific AT commands designed for tracing and supplementing an AT command set known as such (e.g. using a set of AT commands to retrieve trace data or test traffic data from the network, see [0033] line 5 and [0116] line 4-8)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 2, 3, 9, 11 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al in view of Lazaridis (US 5,970,090).in further view of

11. Regarding claims 2 and 3 Ko teaches the system and method as discussed above, but does not teach buffering and delaying of the trace data. However, Lazaridis teaches buffering and delaying of data between the mobile terminal and the network tester (computer) in a mobile network environment (e.g. see abstract, claim 9 and figures 1 and 2 of Lazaridis).

It would have been obvious to one of ordinary skill in the art at the time of invention to buffer and delay the trace data in Ko's system because Lazaridis teaches that this prevents data loss or failure of data transmission in a DTE/DCE interface (see col. 2 lines 40-57).

Regarding claim 9, Ko teaches the trace system in accordance with claim 8. However, Ko does not teach explicitly the trace system further comprise:

a storage block configured for buffering and delaying the trace data in the mobile terminal before its transmission to the network tester.

Lazaridis on the other hand discloses a system connecting a computer to a remote access network terminal via a mobile station, the system comprises:

a storage block (See column 5, lines 30-32) configured for buffering and delaying (See abstract, claim 9 and figures 1 and 2 of Lazaridis) data in the mobile terminal before its transmission to the network tester (e.g. computer, see figure 1).

It would have been obvious to one of ordinary skill in the art at the time of invention to buffer and delay the trace data as opposed to any data by means of storage block as

taught by Lazaridis in Ko's system because Lazaridis teaches that this prevents data loss or failure of data transmission in a DTE/DCE interface (see col. 2 lines 40-57).

12. Regarding claim 11, Ko discloses the terminal according to claim 10, Ko however does not disclose the terminal further comprising:

a storage block configured for buffering and delaying the trace data in the terminal before its transmission further via said standardized interface.

Nonetheless, Lazaridis teaches a storage block (See column 5, lines 30-32) configured for buffering and delaying (See abstract, claim 9 and figures 1 and 2 of Lazaridis) the data in the terminal before its transmission further via said standardized interface (See column 6, lines 1-6, note that an example of a standard interface is the RS-232).

It would have been obvious to one of ordinary skill in the art at the time of invention to buffer and delay the trace data as opposed to any data by means of storage block as taught by Lazaridis in Ko's system because Lazaridis teaches that this prevents data loss or failure of data transmission in a DTE/DCE interface (see col. 2 lines 40-57).

13. Regarding claim 14, the AT commands taught by Ko in view of Lazaridis may be considered to comprise both "specific" and "normal" AT commands. Ko in view of Lazaridis do not teach allowing only one command set at a time.

However, it is well known in the art that the control of the mobile or modem is done by communicating one command at a time to control the operation of the modem or in this case the mobile. It would have been obvious to one of ordinary skill in the art at the

time of invention to allow only one command at a time as the serial communication in DTE/DCE interfaces allows only one command at a time to be transferred.

14. Regarding claim 15, Ko further teaches modifying the trace data to be sent to the network tester (e.g. see [0058] and [0059]). Note that the trace data includes data "substantial" from the point of view of tracing.

15. Regarding claim 16, Ko in view of Lazaridis discloses the terminal in accordance with claim 11, Ko further teaches the terminal comprising a module configured for connecting an external network tester to the terminal, the external network tester being intended for receiving the trace data for providing said specific AT commands (See fig. 5).

16. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ko et al in view of Tehro (US 5884103).

17. Regarding Claim 6, Ko teaches the method as discussed above, but does not specifically teach using the interface for other data transmission.

However, Tehro teaches a transmission interface bus intended for communicating normal and specific user data (See abstract and claim 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine transmitting and communicating testing data and normal user data between the terminal or mobile unit and the network tester such as network testing software in a

computer, because in order to communicate the trace data between the mobile and the computer, a connection needs to be established, which requires the interchange of other data such as hardware driver data, and other specific user information.

18. Regarding claim 7, Ko in view of Tehro further teaches using the bus for data transmission between the tester and the network, from which the trace data is collected simultaneously (note that Ko's data is collected in real time).

Response to Arguments

1. Applicant's arguments filed 08/15/2008 have been fully considered but they are not persuasive.
2. Regarding claims 1, 4, 5, 8, 10, 12, 13, and 17 the examiner respectfully disagrees with the traverse made by the applicant.
3. The applicant submitted that Ko teaches standard AT commands but not specific AT commands for tracing or designed for tracing and supplementing an AT command set known as such. The examiner respectfully disagree because Ko discloses a network testing system for retrieving network traffic related data and trace file, the setting of the parameters for testing is implemented and transmitted to the mobile terminal via an interface such as DTE/DCE interface which is a modem interface that employs AT commands for control and data transmission. It is evident that Ko's disclosure is an implementation and a design application of AT commands based network testing system for transmitting traffic related data. The examiner acknowledges the applicant as it is well known in the art that AT commands standard consists of set or plurality of

commands that are utilized or applied depending on the design or the application, in this instance, Ko's invention employs only those AT commands for transferring information between the network tester and the mobile station and not all the AT commands available in the standards, which imply that his designed application takes advantage of specific AT commands for retrieving said information. Furthermore, it is well known in the art that in AT commands standards consists of a plurality of sets, some of which are basic set, extended, proprietary and others. In applications of modem communication DTE/DCE interface need not to employ extended commands for operating a modem to exchange data transmitted to/from DTE/DCE interface as it is the case in Ko's disclosure.

4. The applicant submitted that claims 8, 10, and 13 as well as the newly introduced claim 17 have the above feature as amended. The examiner respectfully disagrees and acknowledges the above explanation since the amended feature is common among claims 8, 10, 13, and 17.

5. The applicant submitted that claims 4 and 12 are allowable because they are dependent claims upon the aforementioned independent claims. The examiner respectfully disagrees since the dependent claims inherit the deficiency of the aforementioned independent claims.

6. Regarding claims 2, 3, 9, 11, and 14-16, the examiner respectfully disagrees with the traverse made by the applicant.

7. The applicant submitted that claims 2, 3, 9, 11, and 14-16 are allowable in view of their dependency of claims 1, 8, and 10. The examiner respectfully disagrees since said dependent claims inherit the deficiency of the aforementioned independent claims.
8. Regarding claims 6 and 7, the examiner respectfully disagrees with the traverse made by the applicant.
9. The applicant submitted that claims 6 and 7 are allowable in view of their dependency of claim 1. The examiner respectfully disagrees since said dependent claims inherit the deficiency of the aforementioned independent claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISSAM CHAKOUR whose telephone number is (571) 270-5889. The examiner can normally be reached on Monday-Thursday (8:30-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Perez Rafael can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IC

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617